

















Year 5-8 Dotterel Unit

2010

Level 3/4

Related NZC Objectives	<ol style="list-style-type: none"> 1) Building on prior experiences 2) Working together to share and examine their own and other's knowledge 3) Asking questions, finding evidence, exploring simple models and carrying out appropriate investigations to develop simple explanations 4) Using their growing knowledge of science when considering issues of concern to them 5) Exploring various aspects of an issue and making decisions about possible actions 6) Explaining how living things are suited to their particular habitat 7) Appreciating that some living things in New Zealand are quite different from living things in other areas of the world 8) Understanding how people view and use places differently 9) Understanding that events have causes and effects 10) Understanding how people participate individually and collectively in response to community challenges
Related NZC Competences	<ul style="list-style-type: none">  Managing self: Working independently, meeting deadlines, appropriate behaviour, creating strategies to meet challenges and being self motivated  Relating to others: listening actively, sharing ideas, negotiating, co-operating, and recognising and accepting different viewpoints.

	<ul style="list-style-type: none"> ✚ Thinking: Using creative and critical thinking skills, drawing on personal knowledge and intuitions, solving problems, and shaping their own and others actions ✚ Using language, symbols, and texts: Interpreting symbols and images, and recognising how their choice of language affects other people's understanding. ✚ Participating and contributing: Taking on roles and responsibilities, and responding appropriately as a member of a group.
Broad Objectives	<ul style="list-style-type: none"> a) Students will understand how their and others actions or inactions can effect the maintenance of the Dotterel b) Students will understand how various factors impact on the Dotterels survival c) Students will understand the roles that DOC and NWG play in the management and monitoring of the Dotterel d) Students are prepared to contribute to discussions e) Students are prepared to attempt a variety of activities f) Students will understand how rangers and minders work together to manage and monitor the Dotterel g) Students will gain a better understanding of the breeding and behavioural habits of the Dotterel h) Students will gain a better understanding of the habitat of the Dotterel i) Students are able to identify the Dotterel, Dotterel eggs, signage relating to the Dotterel and the habitat that the Dotterel lives in.
Key understandings	<ul style="list-style-type: none"> ✚ Minders

(including terms)	<ul style="list-style-type: none">  Rangers  Dotterel  Endangered species  Predators  Waste rock embankment  Habitat  Vulnerability  DOC  NWG  Predator control  Banding of chicks  Signage  Monitoring  Management
Skills to be developed and applied	Listening, analysing, discussing, observing, working together in groups, critical thinking, writing, planning, drawing, and awareness.
Attitudes to be fostered	Respect for all living species, respect for others habitats, cooperativeness, enquiry, curiosity, innovation, integrity, pride, enjoyment and concentration.

Activities

Worksheet One - Using the PowerPoint presentation and wall display as a resource complete a worksheet based on the Dotterel and its survival

Curriculum	Level/s	Objectives	Key Competences	Resources
Science, Social Science	4	1, 4, 5, 6, 8, 9, 10 a, b, c , e, f, g, h, i	Managing self, thinking	Wall Display, PowerPoint, pens, worksheets

Worksheet Two - Using the PowerPoint presentation and wall display as a resource complete a worksheet based on the Dotterel and its survival

Curriculum	Level/s	Objectives	Key Competences	Resources
Science, Social Science	3	1, 4, 5, 6, 8,9, 10 a, b, c, e, f, g, h, i	Managing self, thinking	Wall Display, PowerPoint, pens, worksheets

Good versus bad effects - Consider a range of given effects and then place them in their appropriate category on the wall display

Curriculum	Level/s	Objectives	Key Competences	Resources
Science, Social Science	3	1, 2, 4, 9 a, b, d, e, f, h	Managing self, thinking, relating to others, participating and contributing	Wall display, laminated list of effects

Dotterel role play – In groups construct a role play that emphasizes ways in which we can protect the Dotterel

Curriculum	Level/s	Objectives	Key Competences	Resources
Science, Social Science	3,4	1, 2, 4, 5, 8, 9, 10 a, b, d, e, f, g, h	Managing self, thinking, relating to others, participating and contributing	-

Dotterel promotion poster – Using the wall PowerPoint presentation and wall display as a resource design a poster to raise awareness of the New Zealand Dotterel

Curriculum	Level/s	Objectives	Key Competences	Resources
Science, Social Science	3,4	1, 3, 4, 5, 8, 9, 10 a, b, e, f, g, h, i	Managing self, thinking, using language, symbols and texts	Paper, coloured pencils, felts

Buzz in quiz – A questions and answers game about the Dotterel

Curriculum	Level/s	Objectives	Key Competences	Resources
Science, Social Science	3,4	1, 2, 8, 9, 10 a, b, d, e, f, g, h	Managing self, thinking, relating to others, participating and contributing	Paper, pens

PowerPoint Presentation – A ten minute introduction about the Dotterel

Curriculum	Level/s	Objectives	Key Competences	Resources
Science, Social Science	3, 4	All of NZC related objectives a, b ,c, d, f, g, h	Managing self, thinking, participating and contributing, using language, symbols and texts	PowerPoint presentation, projector, computer a person to deliver the information

Design a better nest – Investigate a range of other nests and then design a new and improved nest for the Dotterel (can be completed in pairs)

Curriculum	Level/s	Objectives	Key Competences	Resources
Science, Social Science	3,4	1, 3, 4, 9 b, d, e, h	Managing self, thinking, using language symbols and texts, relating to others	Paper, coloured pencils, pens, felts, stapler, glue, and a range of nesting materials such as twigs, feathers, moss, bark etc

Memory Game – Find the pair to each native New Zealand bird

Curriculum	Level/s	Objectives	Key Competences	Resources
Science	3	7 e, i	Managing self, thinking	Memory cards

Identifying eggs – Match the eggs to the correct birds

Curriculum	Level/s	Objectives	Key Competences	Resources
Science	3, 4	7 e, i	Managing self, thinking	Worksheet, pens

A genetically engineered egg: Design a new egg shell for the Dotterel.
Create a plan and write down the factual information. Afterwards make a mock Dotterel egg by using a hard boiled chicken's egg.

Curriculum	Level/s	Objectives	Key Competences	Resources
Science	3,4	1, 3, 4, 5 b, e, g, i	Managing self, thinking, using language, symbols and texts	Hard-boiled eggs, paint, felt pens, pens, paper